

# APPLYING THE GREEN FACTOR TO SOUTH DOWNTOWN

## WHAT IS THE GREEN FACTOR?

The Seattle Green Factor is designed to increase the amount and quality of urban landscaping while allowing flexibility for property owners to develop their property. Additional and appropriate landscaping can add value and interest to new development and maximize benefits of landscaping on the environment, such as natural cooling and insulation, air quality, reduced runoff, and natural habitat.

The proposed Seattle Green Factor for South Downtown will require developers to landscape an area that has the equivalent positive effect on water quality to landscaping 30% of a lot or a .30 Green Factor “score.” This equivalent amount of landscaping may be provided through a menu of landscaping options, including trees and shrubs, permeable paving, green roofs, and vertical green walls and open water features. As is the case in commercial zones, and as proposed for multifamily zones, landscaping provided along rights-of-way in South Downtown can count toward the Seattle Green Factor requirement.



## CONSIDERING THE SEATTLE GREEN FACTOR FOR SOUTH DOWNTOWN

The Seattle Green Factor is a landscaping requirement designed to integrate high-quality landscaping in Seattle’s dense urban neighborhoods that could provide a solution for South Downtown.

Adopted for commercial and neighborhood commercial zones in 2006, the Green Factor encourages developers to find new ways to incorporate landscaping in their projects by providing a menu of landscaping features ranging from trees to green roofs. Different features receive numeric scores based on the public benefits and ecological functions they provide. The composite landscape plan for each project must meet a minimum score.

Sixty-five projects permitted in 2007 featured Green Factor landscapes. DPD has analyzed 42 landscape plans to see how the requirement is being implemented. Each of these projects feature landscaping in or adjacent to the right-of-way, and half featured green roofs and/or permeable paving. While every project included some amount of unconventional landscaping such as permeable paving, green roofs, or vegetated walls, compliance with the Green Factor did not require significant changes to decisions regarding uses within the building or building design.

Establishing a Green Factor standard for South Downtown requires consideration of compatibility with future uses, typical lot coverage and setbacks, and the projected increased costs of additional landscaping and maintenance. The minimum score of .30 required in commercial zones is based on the space available for landscaping in commercial lot setbacks, sidewalks, and on structures. The .60 score currently proposed for multifamily residential zones is the result of studies suggesting that the larger setbacks for residential structures allow more landscaping than do the typical lot configurations in commercial zones.

## The Benefits of Landscaping

Trees, plants, and landscaped areas are vital to maintaining livability and ecological processes in the built environment. Patches of green in the urban fabric help protect air and water quality, and provide a wide range of benefits including:

- **Stormwater management.** Foliage and branches help slow and reduce the quantity of rainwater reaching the ground, while roots and healthy soils help infiltrate stormwater. This reduces demand on our sewer systems and receiving waters.
- **Improved livability.** While all can acknowledge the aesthetic benefits of landscaping, new research suggests that planted areas contribute to livability in surprising and profound ways. Trees and other vegetation in urban areas help lower stress levels, improve concentration in children, and even lower crime rates.
- **Energy efficiency.** Plantings help cool buildings in the summer and insulate them in the winter. The energy savings can be significant for individual build-

ings and even more so for neighborhoods. Because energy savings translate to greenhouse gas reductions, landscaping is included in Seattle's Climate Action Plan.

- **Reduced urban heat island effect.** Roads and buildings hold in heat from solar radiation, causing cities to have higher temperature peaks than surrounding areas. While dangerous heat waves don't occur often in Seattle, rising temperatures in the region mean that the heat island effect will become more of a concern in coming decades. A recent University of Washington climate study projects increasing heat-wave fatalities by 2025. Through shade and evapotranspiration, plantings can help protect Seattle from extreme conditions in the future.
- **Improved habitat.** The more trees, shrubs, and perennials a city has, the more habitat it offers to birds and beneficial insects. As dense development exerts increasing pressure on wildlife, it is important to think creatively about how habitat can be brought back into the city.

## Natural System and Landscaping in the Comprehensive Plan

Comprehensive Plan goals and policies support incorporating natural system elements into new construction and developed areas.

- **Environment Goal 3:** Use natural systems to maintain and enhance environmental quality by having them perform such functions as cleaning air and water, and controlling stormwater runoff.
- **Environment Policy 10:** Strive to increase the amount of permeable surface and vegetative cover in the city in order to mitigate the heat island effect of developed areas, control stormwater flows and reduce pollution.







The Comprehensive Plan also acknowledges the fiscal benefits of enhancing the green infrastructure.

- Environment Policy 8: In order to reduce the financial investment in built infrastructure while controlling the environmental impacts that infrastructure can cause, explore opportunities to restore or productively use the functions that a healthy ecosystem can provide in conjunction with, or as a substitute for, built infrastructure.

Finally, the Comprehensive Plan provides guidance for landscaping standards applied to industrially zoned areas.

- Land Use Policy 15: On sites that are highly visible to the public because of their location on selected major arterials, require new development to provide street trees and landscape screening in order to promote a positive impression of the city’s industrial areas. Streets appropriate for this special treatment are:
  1. Streets that provide major routes through the city and/or serve as principal entrances to downtown;
  2. Streets that provide the principal circulation route within an industrial area; and
  3. Streets where right-of-way conditions will permit required landscaping without conflicting with industrial activity.

## EXISTING LANDSCAPING REQUIREMENTS IN SOUTH DOWNTOWN

Due to the historic predominance of commercial and industrial uses, very little landscaping is required in South Downtown. In addition to landscaping standards for parking lots, DMR and IC zones require landscaping along rights-of-way and screening of blank facades. For parcels in the DMR zone, without full lot coverage, 20% of the area not covered by buildings must be landscaped. NC2 zones, a relatively small part of South Downtown, already require compliance with the Green Factor.

Although some zones in South Downtown have no landscaping requirements, there are many reasons to introduce such a requirement at this time:

- The Livable South Downtown Planning Study anticipates more residents, workers, and visitors in South Downtown. Better landscaping and increased vegetation will help make the area more attractive, pleasant, and safe.
- Many uses in South Downtown (offices, retail, multifamily residential) must meet landscaping requirements when they occur in other parts of Seattle.
- Each of the neighborhood plans call for the introduction of “green” elements throughout the neighborhood of South Downtown.



## PROPOSED GREEN FACTOR REQUIREMENT FOR SOUTH DOWNTOWN

Case studies included in Appendix E suggest that Green Factor would be an appropriate and effective standard to achieve better landscaping in South Downtown. A .30 Green Factor score for all new development projects exceeding 20,000 square feet gross floor area of new construction is proposed.

Based on comments received in each of the historic districts in South Downtown, the recommendation includes a provision to allow modification of the Green Factor requirement by the Director of DPD in consultation with the Director of the Department of Neighborhoods if it is determined that the requirement will adversely affect historically significant features on the development site.

## GREEN FACTOR PROPOSAL FOR SOUTH DOWNTOWN

.30 Green Factor throughout all zones of South Downtown

Applied to projects that exceed 20,000 square feet of new construction

May be modified when the requirement conflicts with the protection of historic resources

